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# Canning the World, One Empire at a Time

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### Abstract

The history of canned food illustrates how logistical innovation profoundly reshaped economic, social, and geopolitical dynamics on a global scale. Originally developed to extend the shelf life of food, canned foods quickly became a strategic tool for colonial empires, ensuring stable military and civilian supplies while reinforcing control over conquered territories. Their widespread introduction in the colonies transformed local diets, leading to food standardization, cultural homogenization, and increased dependence on imported products—often at the expense of local production and traditional culinary knowledge. The industrialization of canning not only fueled the growth of new markets but also reinforced an asymmetrical economic model, in which metropolitan centers extracted resources from the colonies without fostering their autonomy or food sovereignty. However, the rapid expansion of the canning industry also raised significant environmental and public health concerns, including issues related to preservation methods, additive use, and waste production. This article explores the tensions between logistical progress and geopolitical power dynamics, emphasizing the pivotal role of the canning industry in the globalization of exchanges and the restructuring of food systems.

### Keywords

Canned food, Colonization, Geopolitics, Globalization, History, Logistics, Nutrition, Supply chain

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# 1. Introduction

In an era of procurement instability driven by successive geopolitical crises—and the need to maintain maximum food quality despite these challenges—a quiet invention has profoundly reshaped our relationship with food: canned food (Shephard, 2000). While now synonymous with well-stocked kitchen cabinets and convenient meal solutions, its history is deeply intertwined with the economic, social, and geopolitical upheavals of the past two centuries. In many ways, the canning industry represents the "edible side" of the Industrial Revolution, serving as an emblem of shifting food consumption patterns (Magagnoli, 2020). Initially developed as a strategic necessity in the early 19th century, canned food—enabled by tin-plated iron containers—was first a military and colonial tool (Forbes-Ewan *et al.*, 2016) before gradually becoming a cornerstone of global trade and the industrialization of food systems. Its evolution not only highlights human ingenuity in overcoming logistical constraints as supply chains expanded but also demonstrates how innovations in packaging materials reshaped economic and social structures on a global scale, profoundly redefining the distribution and consumption of food. Beneath the apparent simplicity of a tin lies a complex web of power dynamics, economic competition, and cultural transformation—forces that continue to shape food practices and technologies today.

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Far from being just a commodity, canned food played a pivotal role in the expansion of European colonial empires and the globalization of trade (Sharma, 2012), facilitating both the movement of resources and the geographic extension of supply chains. By ensuring stable provisions for armies and metropolitan populations, canned foods helped reinforce imperial structures and sustain the economic dominance of a few major superpowers over their colonies—often at the expense of local producers. At the same time, canned food revolutionized eating habits and transformed agricultural production, fueling the rise of the modern agri-food industry and the development of large-scale distribution networks. However, it would be shortsighted to overlook the persistent inequalities that accompanied these changes. Colonies, increasingly dependent on metropolitan production, saw their food autonomy eroded in favor of an asymmetrical economic model—one characterized by the unidirectional flow of market resources from the periphery to the center, to use Amin's (1977)terminology. Studying the history and impact of canned food, therefore, requires looking beyond its role in food preservation to consider its broader geopolitical and social consequences.

This article explores the following research question: *How did the technological innovation of food canning in the 18th century influence the progressive globalization of trade during the 19th and 20th centuries?* The objective is to examine the impact of this innovation on colonial societies, particularly its role in transforming food practices, trade networks, and relations between metropoles and colonies. Existing literature on canning primarily focuses on its technical and economic aspects, often overlooking its societal and cultural implications. This study addresses that gap by investigating how the canning industry shaped social structures, food consumption patterns, and power dynamics within and beyond colonial empires. Through a historical and analytical approach, the research underlines that canning was not merely a technological advancement; it also played a pivotal role in redefining social relations, reshaping consumption habits, altering power structures, and fostering the emergence of an interconnected global market. By offering a comprehensive perspective on the multifaceted role of canned food in colonial and global trade, this analysis contributes to a deeper understanding of the broader societal impact of technological innovations and their influence on international exchanges.

Building upon previous research (see Box 1), this article examines how food canning, beyond being a mere technological advancement, became a powerful tool for transforming economic and social systems, particularly within colonial contexts. It permanently reshaped production and consumption structures on a global scale. Section 2 explores how canning addressed logistical challenges in military expeditions and colonial territory management, establishing centralized control over food resources and facilitating the long-distance projection of power by imperialist states. Section 3 analyzes its role in restructuring local economies and altering diets, highlighting dependencies created by its industrialization and significant imbalances between producers and consumers, especially in formerly self-sufficient regions. Section 4 examines the long-term impacts of canned food, emphasizing that it was far from a harmless object; rather, it embodies the tensions and contradictions of food globalization, oscillating between logistical necessity and an instrument of economic and political domination. Finally, Section 5 discusses the findings, implications, limitations, and future research avenues. This analysis underscores the dual nature of canned food packaging, navigating between progress and control, autonomy and dependence, while also exploring its legacy for contemporary food systems.

# Box: 1

### **Methodological Considerations**

This article employs a three-stage methodology: (1) describing the technological innovation of canned food; (2) characterizing its influence, including scope, temporality, and location; and (3) assessing changes in the social environment affected by the innovation. By utilizing a historiographical approach that leverages secondary sources, the study interprets and analyzes past events based on existing work, enabling contextualization and synthesis without direct access to archives. As McDowell (2002)emphasizes, the critical use of secondary sources is essential for developing an in-depth understanding of historical contexts, especially when primary sources are difficult to access. He argues that historians must establish the reliability of materials by choosing, authenticating, decoding, comparing, and interpreting sources. Furthermore, Gaddis (2004) highlights that researchers can legitimately build robust analyses by drawing on previous work and methodically reinterpreting it to bring new perspectives. He notes that historians can construct narratives by synthesizing existing scholarships and offering fresh interpretations. Additionally, Howell & Prevenier (2001) point out that rereading secondary sources is an essential component of historical methodology, as it leads researchers to question existing assumptions. They suggest that engaging critically with secondary sources allows historians to challenge prevailing interpretations and contribute to the advancement of historical knowledge. The methodological approach adopted, grounded in management science, aligns with practices recognized by historians.

Source: The author.

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#### 2. At the Heart of the Colonization Process

In the context of European colonial expansion, food logistics posed a major challenge for both armies and settlers. Long and perilous expeditions were plagued by shortages, malnutrition-related illnesses, and a heavy reliance on local resources, which were often scarce or unreliable. Nicolas Appert's invention of canning marked a decisive turning point, providing a lasting solution to supply chain challenges. This preservation method, which allowed food to be stored for extended periods without spoiling, quickly became a cornerstone of the military and economic strategies of colonial powers, ensuring a stable food supply and reducing health risks. However, the impact of canned food extended beyond the military. It facilitated the establishment of permanent colonies by granting European settlers greater food autonomy. More broadly, it served as both a tool of domination and a catalyst for the transformation of local economies. As a result, its role transcended mere logistics, becoming an integral part of the larger process of imperial expansion.

### 2.1. Canned Food-The Silent Engine of Colonial Logistics

In the 18th century, canned food became a vital logistical tool for colonial expeditions, emerging in a historical context where food management was a persistent challenge in sustaining troops during combat. Reliable provisions were essential, as food preservation played a critical role in ensuring both safety and operational effectiveness (Darsch & Moody, 2009). Before this innovation, armies and colonizers struggled to secure a steady food supply, facing long and often perilous sea voyages, poor shipboard sanitation, and limited storage capacity. These hardships frequently led to severe food shortages, malnutrition, and devastating epidemics among troops. Rations—typically salted meat, hard biscuits, and quickly perishable vegetables—were difficult to preserve for months, increasing the risks of illness and starvation. In response, the invention of canning marked a major technological breakthrough, pioneered by Nicolas Appert in 1795 (Featherstone, 2012). His method involved heating food in hermetically sealed jars to extend its shelf life, keeping it fresh while protecting it from extreme climatic conditions, microbial contamination, and degradation. Figure 1 displays three types of canned foods that circulated in the 19th century.



**Figure 1:** Canned food in use in the 19th century *Source*: Jim Rock Historic Can Collection, Southern Oregon University (2018).

The introduction of canned food into colonial supply chains had a profound impact on the operational capabilities of European armies (Vabre, 2023). The British Army widely adopted canned food to supply its troops stationed in India and Africa, allowing them to operate more efficiently without relying on local food sources, which were often unreliable or insufficient (Naylor, 2000). This advancement in food preservation revolutionized military strategy by providing greater food autonomy, a crucial factor in sustaining prolonged campaigns. Canning offered an ideal solution for transporting large quantities of food without the risk of deterioration during long sea voyages. Canned meats, vegetables, and even fruits helped armies maintain stable food supplies when fresh provisions were scarce, protecting soldiers from scurvy and other diet-related diseases. While the risks of botulism remained a concern in the "pre-industrial canning" era (Petrick, 2010), the durability of canned food made it well-suited for extreme climatic conditions, including the humidity and intense heat of tropical zones. This resilience ensured a steady procurement of safe, accessible food, strengthening military logistics and boosting troop morale in the field (see Box 2).

# Box: 2

### Fuel for the Front: How Canned Food Sustained WWI Soldiers

During WWI, as frontline supplies were often inadequate, soldiers needed food that could be preserved. In theory, each soldier was allocated 500 grams of war bread, between 300 and 500 grams of meat (depending on the period), as well as pasta and rice. Two new items were introduced into military rations: chocolate and canned food. These tins typically contained soup (pea, bean, or potato), sausages, or cheese. At the beginning of the 20th century, the typical peasant diet was largely vegetarian, and more than half of all soldiers came from rural backgrounds. To increase protein intake—essential for muscle maintenance and repair—the military prioritized a meat-based diet, leading to the widespread distribution of canned meat, known as "boîtes de singe" (bully beef or canned willy) in French military slang. Meat also provided iron and essential vitamins, particularly B12, helping to prevent anemia and other nutritional deficiencies.

Source: Adapted from https://www.boeser-wolf.schule.de/ (Accessed April 16, 2024).

# 2.2. Canned Food-A Tool of Control and Domination

Beyond strictly military needs, the transport of canned food played a crucial role in the economic colonization of territories by European superpowers, as exemplified by the Pétain regime's display at the 1941 *Foire Internationale de Lyon* (Blanchard &Boëtsch, 1994). Settlers in remote regions greatly benefited from this innovation, as establishing colonies in isolated areas—often plagued by food shortages and inadequate logistical infrastructure—would have been nearly impossible without canned food. By facilitating the long-term settlement of European populations, canned food helped overcome the challenges posed by unpredictable agricultural cycles and reliance on local food crops. Canned food provided colonial markets with greater stability, supplementing local production,

which was often insufficient to sustain European settlers, while also introducing new dietary habits and significantly altering consumption patterns (Raschke & Cheema, 2008). From this perspective, canned food enabled the expansion of agricultural and industrial colonies, ensuring reliable food supplies and maintaining steady trade between European home metropolises and their overseas territories. Non-perishable goods contributed to the development of more resilient economies in colonized regions, offering a degree of autonomy from the home metropolis—though this autonomy was still largely constrained by imperialist economic structures.

Lastly, preserves played a crucial role in managing food crises in the colonies. During times of shortage, when food supplies became uncertain, preserves allowed for the creation of essential strategic reserves, particularly as they gained wider acceptance among consumers (Lyon & Kinney, 2013). These reserves not only helped prevent famines but also ensured steady food procurement, even under unfavorable conditions. Colonial authorities stored large quantities of food, confident it would not deteriorate over time, and prepared for possible supply disruptions caused by conflict or natural disasters. This approach was not entirely novel, as canned food has long been recognized for its importance during wartime when procurement lines are cut off or disrupted. In short, canned food stocks became a vital resource for sustaining colonial populations and enabling military operations, even in the most remote areas. It is no exaggeration to say that canning had a profound practical impact while also reinforcing social and economic stability in the colonies. It created a dependency on these products and cemented their central role in colonial trade, becoming a cornerstone of imperialist strategies.

### 3. First Wave of Globalization

In the 19th century, the first wave of globalization was marked by technical and logistical innovations that expanded international trade across an unprecedented geographical scale, particularly with the creation of the first consistent maritime routes connecting port cities around the world (Rodrigue, 2021). Canning, which was invented at the end of the 18th century, stands as one of the most emblematic examples. As maritime infrastructure improved and transportation accelerated due to advancements in navigation and shipbuilding, preserves helped overcome one of globalization's greatest challenges: the rapid spoilage of many foodstuffs. Before canning, international food trade was limited by the perishable nature of products, which deteriorated quickly during transport. Canning solved the logistical problems of food preservation, enabling long-distance shipping without the risk of degradation. This innovation paved the way for a new era of international trade, in which food products could be transported across oceans and continents without perishing, ensuring food security for soldiers, colonizers, and populations in overseas territories. As Goody (2017) suggests, canning played a key role in the emergence of a "world cuisine" (see Box 3).

### Box: 3

#### From Luxury to Legacy: How Canned Food Took Over the World

The first canned food as we know it today was produced in 1813, but it took another century for it to become a global phenomenon. In its early days, it was considered a luxury item, reserved for the elite and the military. In France, for instance, producing a tin of sardines in the 1850s required the equivalent of six hours' wages for a female worker, making it prohibitively expensive for the working class. Despite its high cost, canned food gradually gained acceptance. Industrialization and the mechanization of manufacturing techniques reduced production and logistical costs, making it more accessible. Thanks to their long shelf life and practicality, canned goods became a staple of military rations before becoming an integral part of civilian diets. Local dishes around the world began incorporating canned ingredients, such as Jamaican bully beef, made from American corned beef. In British India, cheddar, pudding, and tinned sausages became household staples, contributing to the standardization of food at the expense of local culinary traditions. The globalization of food was well underway.

Source: Adapted from https://www.rfi.fr/fr/ (Accessed July 6, 2024).

# 3.1. Canning and the Transformation of Global Trade

The rise of canned food accelerated the integration of the world's economies in the 19th and 20th centuries. Thanks to industrial advancements, European countries were able to export preserved food products on a massive scale to their colonies, creating an ever-expanding food supply chain. The export of preserved foodstuffs fed colonized populations, supported military troops stationed abroad, and provided long-lasting food rations for explorers and

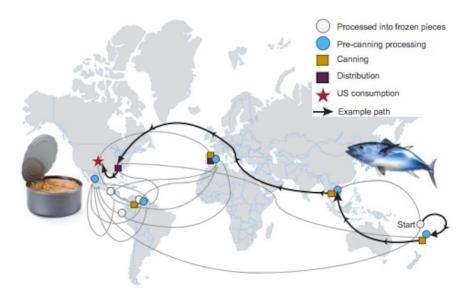
travelers. At the same time, the colonies supplied a wide range of raw materials to European superpowers, establishing a two-way trade flow that strengthened economic ties between the home metropolises and their overseas territories. The canning industry thus played a pivotal role in increasing trade volumes and facilitating the ongoing process of globalization (Nuetzenadel & Trentmann, 2008), during a time when demand for food products steadily grew alongside population expansion and rising industrial needs. This led to the formation of an interconnected global economy, where colonies became producers of raw materials and home metropolises became central hubs for processing and distributing preserved food products to markets worldwide.

The export of canned food was further enabled by the expansion of maritime infrastructure and trade routes. Ships, which now connected Europe more swiftly with Asia, Africa, and the Americas (Rodrigue, 2021), played a pivotal role in expanding global trade. The transport of canned food, a key product of this era, became a major driver of international maritime commerce. Thanks to its ability to withstand long sea voyages without spoiling, canned food allowed for a broader range of products to be traded, provided it did not pose a risk of contamination (Steel & Lowrie, 2025). Not only did armies and colonizers benefit from this procurement system, but canned food also fueled rising demand in metropolitan markets. In fact, preserves became a staple consumer product, not only nourishing soldiers and colonizers but also feeding urban populations in major European and North American cities (Pearson, 2016). In this way, preserves helped foster the development of new markets and facilitated the expansion of global capitalism by supporting the specialization of European industrial economies, which focused on manufacturing, while colonies concentrated on the extraction of natural resources.

# 3.2. Canning and the Expansion of Global Capitalism

Canning has had a significant influence on the agricultural and fishing industries, which underwent major transformations due to the ability to store and transport food products across the globe. Canning created new demand for certain agricultural and seafood products, such as vegetables, fruits, fish, and meats. Fisheries, for instance, were revolutionized by the invention of canning, as they expanded their production beyond local markets, now targeting international consumers (Jarvis, 1988). Similarly, agriculture benefited from the preservation of crops, enabling agricultural products to travel long distances without spoiling. This development allowed many agricultural regions to increase their production and exports, boosting local and regional economies while reinforcing the role of canned food as a central product in the globalization of trade. This process also contributed to the creation of new industries in the colonies, such as industrialized fishing and canned fruit production, further integrating these territories into an ever-expanding international trade network, which in turn fueled global economic growth and expanded the reach of international markets to new regions and populations.

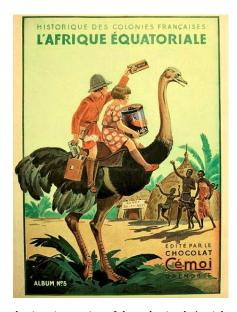
In this early phase of globalization, preserved foods played a crucial role not only in the expansion of colonial states but also in integrating global economies by enabling the large-scale circulation of goods. By facilitating trade between home metropolises and colonies, supporting agricultural and fishing industries, and contributing to the rise of global capitalism, preserves marked a pivotal turning point in the history of international commerce. They connected continents more closely and allowed food products to move more freely, reinforcing economic specialization and aiding in the consolidation of colonial empires. By transforming procurement systems, canning industry created new commercial dynamics and deepened the economic dependence of colonies. Even today, the impact of canned food on trade globalization is evident in the role of the modern food industry within interconnected economies (see the case of tuna analyzed by Havice & Campling [2017] and summarized in Figure 2). This historical trajectory underscores the profound influence of technological innovations in shaping world trade and modern supply chains.



**Figure 2:** Illustrative supply chain for canned tuna in the 21st century *Source*: Food & Drug Administration (2011: 14).

# 4. Social and Economic Impacts

Canning has had profound and complex consequences for societies and economies in the context of globalization. Ingulstad*et al.* (2015) edited a book that pointedly refers to tin as the "*Devil's metal*" in this regard. On one hand, canned food provided unprecedented stability in regions where food procurement was uncertain. On the other hand, it reinforced imperialist relationships and deepened inequalities between home metropoles and colonies. In colonial empires, canning facilitated military and economic control by centralizing food supply chains, enabling colonial superpowers—primarily Great Britain and France—to strengthen their grip on vast, often remote territories where logistics posed a major challenge. In the 1930s, sticker books aimed at French schoolchildren depicted colonization and its supposed benefits (Heath, 2014), including canned food as a symbol of progress, as seen in Figure 3's portrayal of a little girl. By controlling the production and distribution of canned foods, colonial empires mitigated the risk of food shortages while tightening economic dominance over their colonies. However, this system hindered autonomous development, locking colonies into an asymmetric economic model in which they supplied raw materials while relying on industrialized food production from the home metropoles.



**Figure 3:** The colonizer in service of the colonized: A sticker book example *Source*: Heath (2014: Appendix).

The introduction of canned food in the colonies profoundly altered local diets and the socio-economic dynamics surrounding food. Colonized populations became increasingly dependent on imported food products, often at the expense of the diversity of locally produced foods (Durmelat, 2015). Canned food, such as meats, vegetables, and fruits, were easier to store and transport than fresh produce, but their widespread use sometimes limited access to nutritious and varied local foods. As a result, traditional dietary practices were gradually replaced by standardized, industrialized food, significantly reducing dietary variety. This shift not only affected the health of local populations, leading to nutritional deficiencies linked to a monotonous diet, but also contributed to the homogenization of eating habits worldwide. Furthermore, the growing reliance on canned food reinforced social inequalities, as only those with access to imported products reaped the benefits of canned food, while others, less privileged, were forced to rely on often insufficient and unreliable local food sources, exacerbating disparities in wealth, social mobility, and access to nutrition in colonized societies.

In economic terms, the production of canned food generated specialized markets as early as the 1920s, notably in the food, metal, and chemical industries (Bigelow, 1928). The growing demand for canned food stimulated industrial innovation, particularly in the manufacture of tin cans and the development of new food preservation techniques. For instance, advances in the use of chemical preservatives extended the shelf life of canned food, making it possible to export them over even longer distances. The industrialization of canning not only facilitated international trade but also encouraged the growth of large-scale companies and the rationalization of food production on a global scale. However, the canning industry has had a detrimental impact on the environment, particularly with an increase in the production of metal waste, plastic packaging, and chemical residues (Cima, 2011). The use of chemical preservatives, while necessary to extend the shelf life of products, has compromised the nutritional quality of transported foodstuffs, fueling debates about their long-term health effects. The perils of canning remain a powerful sensation in the populations of the colonies, with the permanence of anxieties about industrial production (Tarulevicz, 2025).

Finally, the introduction of canned food disrupted food systems in the colonies (see Box 4). Where food production had once been a local activity, closely integrated with traditional agricultural practices, the industrialization of canning created a global market in which canning factories often overshadowed small local farms. In Africa, Asia, and Latin America, the colonies became part of a mass food production system driven by the needs of the home metropolises, with significant intervention from the colonizers (Yazid, 2014). While this process generated operational efficiency in food production, it also marginalized local agricultural practices and techniques, limiting the diversity of products available to consumers. Specific crops for canning, such as tomatoes or tropical fruits, were imposed on the colonies, replacing more diversified and sustainable agricultural practices. The industrialization of food thus facilitated the integration of colonies into the global economy while reinforcing their subordinate position within the world economic system, contributing to the perpetuation of socio-economic inequalities. Throughout the 20th century, this situation endured, as the canning industry became one of the pillars of food globalization, consolidating the dominance of the major economic superpowers.

# Box: 4

### Colonization and the Changing African Diet

Centuries of colonization in Africa have brought about significant changes in the way indigenous populations feed themselves today. Long before colonization, African peoples relied on the natural produce available to them, as well as their own agricultural practices. In many traditional African cultures, plant-based foods such as cereals, legumes, fruits, and nuts formed a vital part of the staple diet. Some societies, particularly those near coastal areas, practiced fishing and included fish in their meals. Food preservation methods included drying, smoking, fermenting, and salting. In many African countries, such as Benin, meals typically consist of vegetables, starchy foods, and tubers like *Tévi* (yam) and *Dokoui* (sweet potato). In Cameroon, one example is *Mintoumba*, a traditional cake of the Bassa people made from freshly fermented cassava and red palm oil. However, with the arrival of canned food, diets began to shift, leading to a rapid "Westernization" of eating habits.

Source: Adapted from https://place-for-africa.org/ (Accessed December 29, 2024).

# 5. Discussion and Conclusion

The history of canned food serves as a compelling example of how a technical and logistical innovation can deeply transform economic, social, and geopolitical dynamics (Campling, 2016; Henriques, 2022). Initially conceived as a

practical solution to extend the shelf life of food, canned food quickly became a strategic tool in colonization and warfare, eventually playing a significant role in the globalization of exchanges. This evolution highlights how logistical innovations can reshape complex systems—ranging from military organization to the structure of international trade—while also influencing local diets and economic structures. However, beneath the development of the canning industry lies emerging forms of dependency and inequality, illustrating the tensions inherent in technological revolutions. Canned food should not be viewed merely as a means of improving resource management but also as a catalyst for transformations affecting wealth distribution, and the balance of economic power. Its role in shaping colonial empires, fostering an interconnected global market, and altering consumer habits underscores the lasting influence technology can have on human history.

# 5.1. Findings

This article highlights several key elements in understanding the impact of canned food on colonial dynamics and the globalization of trade. First, it explores how canned food allowed European superpowers to strengthen their control over conquered territories by stabilizing supply chains, reducing reliance on local resources, and ensuring the sustained presence of military and administrative forces. Second, it examines how the widespread adoption of canned food altered diets in the colonies, introducing a standardized diet that often-undermined local culinary traditions, reduced dietary diversity, and reshaped food consumption patterns. Third, it underscores the economic consequences of this innovation, demonstrating how the industrialization of canning created new markets, spurred investment in large-scale food production, and helped structure international trade circuits. Fourth, this article addresses the ambivalent effects of canned food, which functioned both as a logistical advancement and as a tool of economic and social domination. While it improved living conditions by enhancing food preservation and accessibility, it also deepened colonial economic dependence on the home metropoles, reinforced extractive trade systems, and encouraged local economies to prioritize cash crops for export over food self-sufficiency.

As part of ongoing academic debates on food globalization and colonial legacies, this article engages with works that critically examine the role of logistical innovations in shaping economic and social power dynamics. It builds on Stoler's (2016) analysis of the persistence of colonial logics in global supply chains—despite decolonization processes set in motion as early as the 1960s—by illustrating how these dynamics continue to shape food dependencies and reinforce structural inequalities. Moreover, by highlighting the lasting impact of canned food on dietary homogenization and the limited autonomy of local economies, the article contributes to discussions on food sovereignty challenges initiated by Patel (2012 [2007]) and deepens reflections on the tensions between industrialization and the preservation of indigenous food cultures. Finally, the analysis advances a *geopolitical reading of logistics* by examining the far-reaching consequences of globalized production systems, extending the perspectives developed by Tsing (2021 [2015]) on the deep interconnection between trade, logistics, environmental destruction, and power, as well as Cowen's (2014) critical approaches to the "militarization" and "securitization" of global supply chains.

### 5.2. Theoretical and Managerial Implications

The contribution opens several interesting theoretical perspectives in the fields of economic history, logistics, and post-colonial studies. From a historical perspective, it reinforces the idea that technical innovations are never neutral; they emerge within specific power structures, socio-economic contexts, and historical contingencies. From a logistical perspective, analyzing the role of canned food broadens the understanding of packaging not only as a tool for rationalizing flows but also as an instrument of control, standardization, and geopolitical influence. It is important here to emphasize the contribution made to theories of globalization by demonstrating how agrifood innovations accelerate the economic integration of territories, reshape trade networks, and redefine relationships between centers and peripheries. By supporting large-scale procurement, canning has fostered a model of economic dependence between home metropolises and colonies, illustrating the mechanisms of the international division of labor. Finally, from the standpoint of post-colonial studies, the exploration of canned food highlights the continuity between colonial practices and contemporary economic structures, underscoring that the inequalities stemming from this period of history persist and continue to shape the dynamics of global food trade today.

Indeed, the globalization of supply chains, catalyzed by innovations in food packaging, continues to profoundly influence contemporary practices. While canned food facilitated the standardization of diets worldwide, its legacy remains evident in the dominance of large agribusinesses that impose uniform and unhealthy food models (de Mooij, 2019; Wood *et al.*, 2021). To the detriment of local diets, these practices perpetuate inequalities reminiscent of those

generated by colonial structures. Furthermore, the constant dependence of developing countries on processed food products reflects a continuity with the economic domination established during the colonial period. This has resulted in the erosion of local culinary traditions, as well as a growing vulnerability to global supply chain disruptions. Finally, issues of indigenous food sovereignty and nutritional security are now at the center of global debates (Abdul et al., 2024), and consumer food choices remain deeply marked by the history of canning, with profound repercussions on cultural diversity, public health, and ecological sustainability. In short, the article highlights the persistent tensions between the industrialization of food processes and the preservation of local agricultural knowledge and practices.

From this viewpoint, the article's lessons can be valuable for companies, policymakers, and institutions involved in procurement system management. First, they highlight the role of logistical innovations in shaping trade networks and emphasize the need to consider the long-term economic, social, and political effects of industrial decisions. The colonies' reliance on canned food underscores how production choices influence economic structures, labor markets, and regional development within global value chains. Second, the introduction of a new food technology extends beyond economic considerations; it also reshapes consumption patterns, cultural identities, and nutritional balances. Today's agri-food companies must reflect on how their products alter local eating habits, affect food security, and contribute to dietary homogenization at the expense of traditional diversity. Understanding these dynamics is essential for promoting more responsible food production. Third, the sustainability challenges posed by canning remain relevant today. Industrial production generates metal waste, chemical residues, and high energy consumption, creating significant environmental risks. Companies must invest in sustainable solutions by developing eco-friendly packaging, improving recycling, and minimizing the ecological footprint of food preservation technologies.

# 5.3. Limitations and Research Avenues

Although rich in insights, the contribution has several limitations. First, it focuses primarily on the role of canned food in colonial and global trade but does not comprehensively address national and regional contexts where canned food also played a significant role in both sustenance and local economies. Certain dynamics specific to territories—whether in remote regions or on the periphery of major empires—remain unexplored. A closer examination of these cases would have provided a more nuanced global perspective and deepened our understanding of how local communities adopted and adapted to this innovation. Second, while the economic and logistical dimensions of canning are well highlighted, the contribution does not delve deeply enough into its socio-cultural consequences. The emphasis is on practical and economic aspects, with limited discussion of how food industrialization shaped local dietary practices, culinary traditions, and cultural perceptions of food. Third, the contribution primarily draws on historical and economic sources, overlooking broader perspectives—particularly anthropological, ecological, and medical—which could have provided a more comprehensive understanding of canning's long-term effects on public health, environmental sustainability, and societal transformations.

Three research avenues could be then explored to expand the reflection and deepen our understanding of food systems. The first research avenue involves examining contemporary advancements in food preservation and their role in today's globalized food networks. The emergence of new canning technologies, such as freeze-drying and vacuum pasteurization, offers fresh perspectives on how innovations continue to shape economic and social dynamics. The second research avenue focuses on sustainable alternatives to canning. Given growing environmental concerns, resource scarcity, and increasing demand for healthier, locally sourced food, it is crucial to study how the agri-food industry is adapting to these shifts. Research should also explore what innovations could replace traditional canning while maintaining logistical efficiency and ensuring long-term food security. Finally, the third avenue involves analyzing the impact of canned food on short circuits. While canning has historically driven globalization, it could also contribute to the re-localization of food systems and greater local resilience. Investigating alternative models of canned food production and physical distribution, particularly in the context of climate adaptation, could provide valuable insights into how packaging can be reimagined within a more sustainable and equitable framework.

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